

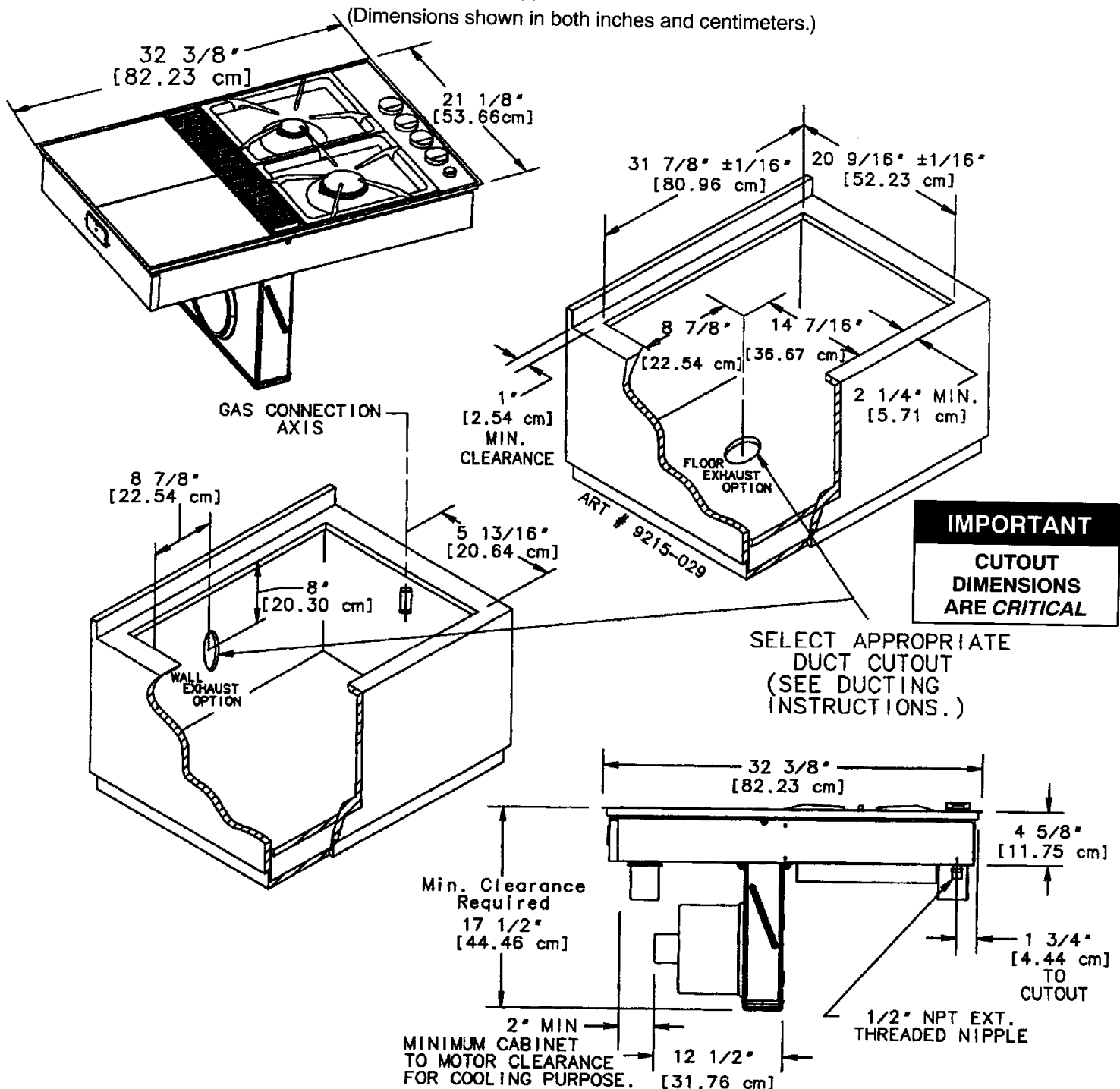
INSTALLATION INSTRUCTIONS

EXPRESSIONS DUAL FUEL COOKTOP

JENN-AIR

403 WEST FOURTH STREET, NORTH • NEWTON, IA 50208

IMPORTANT: Installation should be performed only by a Jenn-Air Authorized Servicer or other qualified installer. Read safety precautions in the Use & Care Manual before using this appliance.



INSTRUCTIONS TO INSTALLER:

- Side Clearance – Unit may be safely installed as near as 2" (5.08 cm) from a side wall if space limitations require. However, a side clearance of at least 6" is recommended for optimum ventilation.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE



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Location Of Your Jenn-Air Appliance

Locate this appliance away from combustible materials such as window curtains and combustible wall decorations. The minimum horizontal clearance between the edge of the appliance and adjacent combustible construction is:

- 0.75 inches (1.90 cm) at rear;
- 2 inches (5.08 cm) at sides

These minimum clearances pertain to vertical surfaces between the countertop level and a level 18" above the countertop.

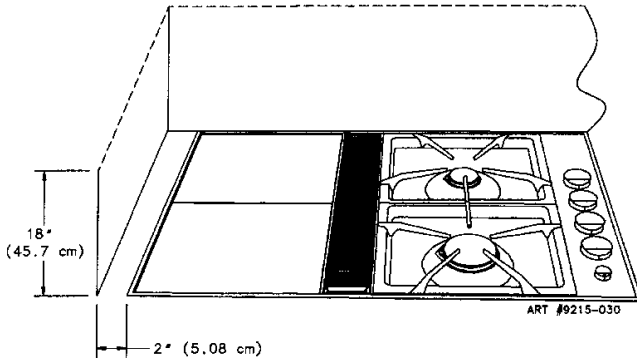


Figure 1: Minimum Horizontal Clearance

NOTE: These are not recommended clearances, but rather the minimum allowable clearances. Overall performance of your cooktop will be enhanced by providing a 6" or greater clearance on either side of the unit.

Installing Cabinetry Over Your Cooktop

Observe the following clearances to overhead cabinetry.

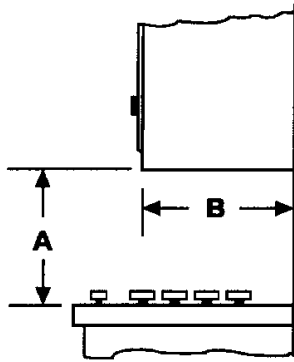


Figure 2: Minimum Clearances to Overhead Cabinetry

A = 30 inches (76.2 cm) minimum vertical clearance between cooking surface and combustible construction or metal cabinets above the appliance. This clearance may be reduced to not less than 24 inches by protecting the underside of the combustible material or metal cabinet above the cooking surface with not less than 1/4-inch insulating millboard covered with sheet metal not less than 0.0122-inch thick.*

B = 13 inches (33.0) maximum depth of cabinets installed above cooking surface.

CAUTION: Avoid use of cabinets above cooktop for storage to eliminate potential hazard of reaching over open flames.

Preparation Of Countertop

The cutout in the countertop into which the appliance is to be installed should be prepared according to the cutout dimensions given on page 1 of these instructions.

CAUTION: Cutout dimensions are critical. Dimensions must be measured and cut accurately to within $\pm 1/16"$ to ensure proper fit.

Important Installation Suggestions:

1. Chamfer all exposed edges of decorative countertop laminate to prevent damage from chipping.
2. Slightly radius corners of cutout and file to insure smooth edges and prevent corner cracking.
3. Rough edges, inside corners which have not been rounded and forced fits can contribute to cracking of the countertop laminate.
4. Unit must be supported on all four sides by the countertop and countertop must be supported within 3" of edge of cutout.

Installation Of Appliance

Follow accompanying ducting instructions carefully.

This appliance is designed to always be vented outdoors. This appliance should be ducted separately from other vented appliances.

This appliance is designed for use with the gas appliance pressure regulator provided.

The installation of this appliance must conform with local codes or, in the absence of local codes, with the latest edition of the National Fuel Gas Code, ANSI Z223.1 USA or current CAN/CGA-B149 INSTALLATION CODE.

This appliance is designed to operate at a pressure of 5 inches of water column on natural gas or, if converted for use with LP gas (propane or butane), 10 inches of water column. Make sure this appliance is supplied with the type of gas for which it is designed.

This appliance was adjusted at the factory for use with natural gas. If, in the future, this appliance is to be used on a different type of gas, all of the conversion adjustments described on pages 4 and 5 must be made by a service technician or other qualified person before attempting to operate the cooktop on that gas. Natural gas should be supplied to the appliance at a line pressure between 6 and 14 inches of water column or, if converted for LP gas, between 11 and 14 inches.

WARNING: If the pressure of the gas system supplying this appliance exceeds 14" W.C., an external regulator (not provided) must be installed in the gas line to reduce the system pressure to no more than 14" W.C. Failure to do this can result in excessive gas flow and explosion.

Make sure your appliance is supplied with the type of gas for which it is adjusted and that the gas is being supplied within the appropriate pressure range.

*Jenn-Air Over-the-Range microwave ovens (model #M418 and M438) have been listed by UL for use over Gas and Electric Ranges. When properly installed at a minimum height of 66 inches from the floor to the top of the microwave, the clearance to the cooking surface at the center will be 13-3/4 inches.

Connecting Appliance To Electricity

Electrical Wiring Information

The neutral of this unit is grounded to the frame through the green grounding wire. If local conditions do not permit grounding of the neutral, untwist or disconnect the green wire and connect the green wire to ground in accordance with local codes. Connect the white neutral to the service neutral.

Proper Electric Supply

You must provide an adequate electrical supply system as required for your cooktop. All wire connections must be in accordance with local codes and properly insulated. Check with local utility for governing electrical codes and ordinances. In the absence of local electrical codes, the National Electrical Code, NFPA No. 70, governing electric cooktop installations must be followed. A copy of the National Electrical Codes, NFPA No. 70, can be obtained by writing to:

NATIONAL FIRE PROTECTION ASSOC.

Batterymarch Park
Quincy, Massachusetts 02269

A three-wire, single phase, A.C. 120/240 volt 60 cycle electrical system (properly circuit protected to meet Local Codes of NFPA No. 70) must be provided. Unit must be properly grounded in accordance with local wiring code. The chart below recommends the minimum circuit protector and wire size if the appliance is the only unit on the circuit. If smaller sizes of wire are used, the unit efficiency will be reduced and a fire hazard may be created. It is advisable that the electrical wiring and hookup be accomplished by a competent electrician.

RECOMMENDED MINIMUM		
K.W. RATING ON SERIAL PLATE	CIRCUIT PROTECTION IN AMPRES	WIRE SIZE, AWG
0 - 4.9	20	12
5.0 - 6.9	30	10
7.0 - 9.9	40	8
10.0 - 11.9	50	8
12.0 - 14.9	60	6

Remove attachment screw and cover from junction box. Connect BX cable power supply to knockout in side of box. Make wire connections, push wires into box. Re-attach cover. Consult local codes for proper power hookup. (Figure 3).

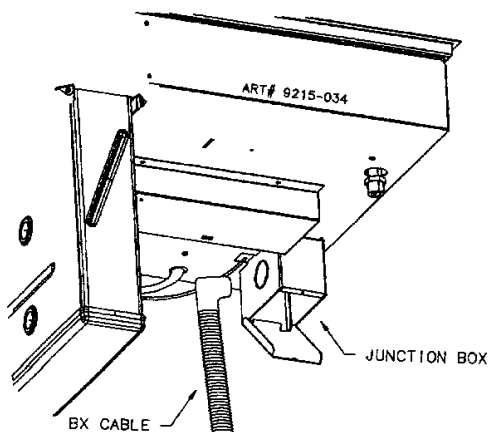


Figure 3

Connecting Appliance To Gas Supply

A TRAINED SERVICEMAN OR GAS APPLIANCE INSTALLER MUST MAKE THE GAS SUPPLY CONNECTION. Leak testing of the appliance shall be conducted by the installer according to the instructions given.

1. Install a manual shut-off valve in an accessible location in the gas line external to this appliance for the purpose of shutting off gas supply to this appliance.
2. Install the appliance pressure regulator supplied with this appliance to the threaded gas inlet of the manifold pipe, taking care to observe proper direction of gas flow through the regulator. Tighten to 20 to 30 ft.-lbs. of torque.
3. Connect the inlet of the appliance pressure regulator to the shut-off valve using a 1/2" NPT pipe nipple of appropriate length and additional pipe fittings, as required.

Use an approved pipe joint compound that is resistant to the action of LP gas on all external pipe threads when making these connections.

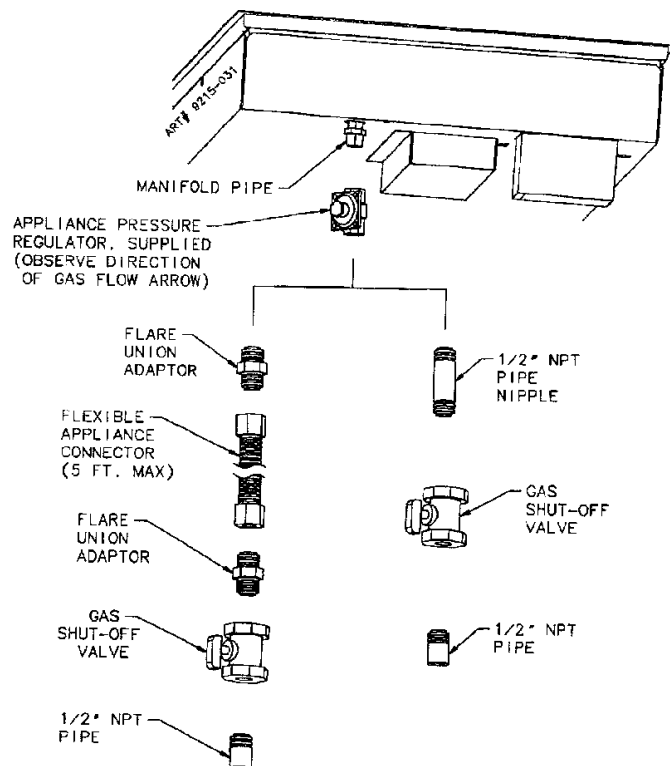


Figure 4: Alternative Gas Connections

A new, A.G.A.-certified, flexible metal appliance connector may be used to connect this appliance to the gas supply (figure 4.) The flexible connector should have a diameter of 1/2" flare union adaptor is required at each end of the flexible connector. **CAUTION:** Do not attempt to attach the flexible connector directly to an external pipe thread.

IMPORTANT

Apply a non-corrosive leak detection fluid to all joints and fittings in the gas connection between the supply line shut-off valve and the range. Include gas fittings and joints in the range if connections were disturbed during installation. Check for leaks! bubbles appearing around fittings and connections will indicate a leak. If a leak appears, turn off supply line gas shut-off valve, tighten connections, turn on the supply line gas shut off valve, and retest for leaks. Never test for gas leaks with an open flame.

NOTE: In Canada, gas utilization codes prohibit use of street elbows. Use standard pipe elbows and make modifications to these instructions as necessary.

Pressure Testing

This appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 PSIG (2.5 k pa).

This appliance, as well as its individual shutoff valve, must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of 1/2 PSIG (3.5 k Pa).

When checking for proper function of the appliance pressure regulator, make certain pressure of natural gas supply is between 6 and 14 inches of water column or, if converted for LP gas, between 11 and 14 inches.

Converting Appliance For Use With LP Gas

WARNING

Propane conversion is to be performed by a JENN-AIR AUTHORIZED SERVICER (or other qualified agency) in accordance with the manufacturer's instructions and all codes and requirements of the authority having jurisdiction. Failure to follow instructions could result in serious injury or property damage. The qualified agency performing this work assumes responsibility for this conversion.

WARNING

Electrical power and gas must be turned off prior to conversion.

This appliance was adjusted at the factory for use with natural gas. To convert it for use with LP gas (propane or butane), both of the following modifications must be performed:

A. Replace all orifice spuds

Step 1: Remove the grates and burner heads.

Step 2: Remove aluminum venturi tube.

Step 3: Trim a small piece of masking tape to the size of a dime and affix it over the end of a 5/16" nut driver.

Step 4: Firmly press the nut driver over the orifice spud (figure 5) and loosen spud by turning counterclockwise. Carefully lift nut driver out of burner throat. Orifice spud should be captured in the recess. Repeat this step for each burner.

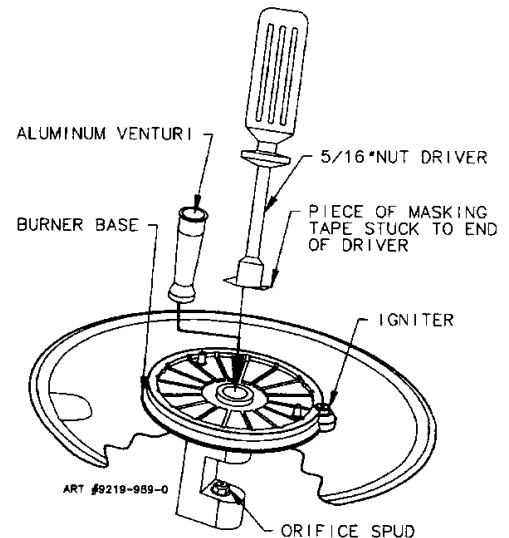


Figure 5: Removal of Orifice Spud

Step 5: Locate the LP orifice spud packet taped to the underside of the burner box. The spuds have small numbers stamped on the side. This number codes the orifice diameter and its correct burner location. The following illustrations show correct LP orifice spud location for 4 burner and 5 burner models, respectively.

Step 6: With the masking tape still in place in the recess of the nut driver, press an LP orifice spud into the recess so that it is snugly captured.

Step 7: Carefully install the orifice spud in the appropriate burner throat by turning clockwise to tighten. Tighten to a torque of 15 to 20 inch-lbs.

Step 8: Replace cylindrical aluminum venturi tubes. Replace burner heads and grates. Index each grate to its burner pan.

Step 9: Save the orifices removed from the appliance for future use.

Installation of LP Orifice Spuds

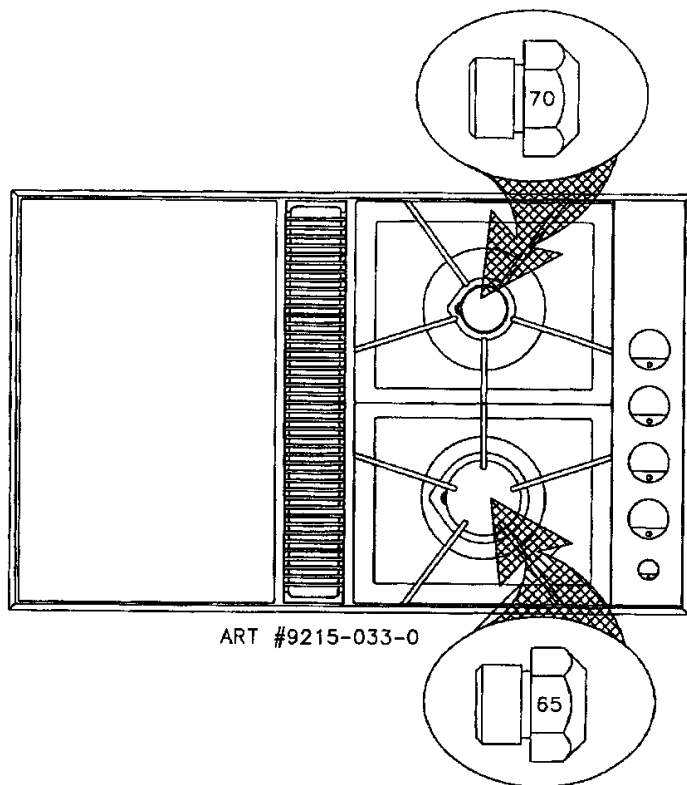


Figure 6

B. Invert Cap in Appliance Pressure Regulator

(See figures 7 and 8.) With the appliance installed, the regulator is located on the underside of the burner box on the right hand side at the inlet to the gas manifold. Identify the make of appliance regulator on the unit and follow the instructions in the appropriate illustration.

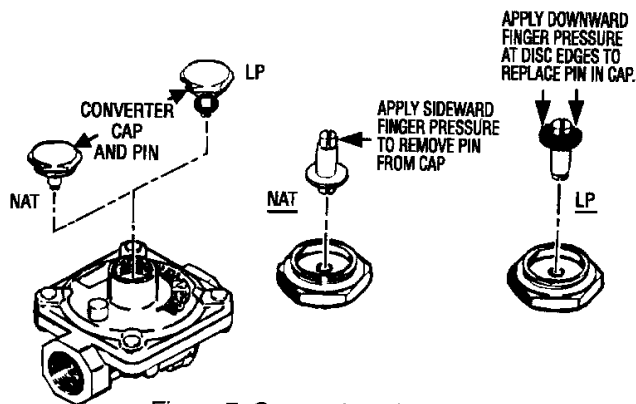


Figure 7: Conversion of Maxitrol Appliance Pressure Regulator

With a quarter, engage slot and rotate cap 1/8 of a turn counterclockwise. To remove cap, turn cap over and reinstall.

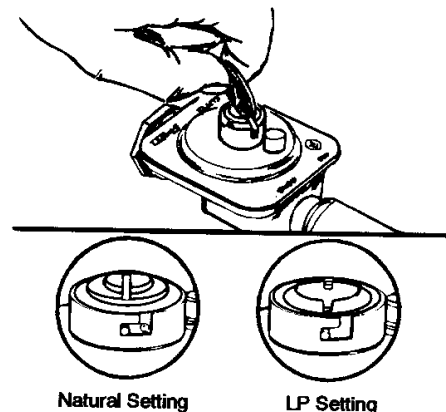


Figure 8: Conversion of Harper-Wyman Appliance Pressure Regulator

After conversion, steps A and B have been completed, check the appearance of each burner's flame at the **Hi** and **Lo** settings against figure 9. If the flames appear too large or too small, review all steps to make sure they were completed correctly.

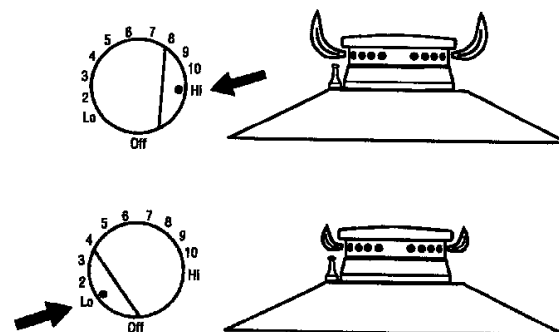


Figure 9: Flame Appearance at **Hi** and **Lo**

To Convert Appliance For Use With Natural Gas

If this appliance has been converted for use with LP gas, each of the following modifications must be performed to convert the unit back to natural gas.

A. Replace all orifice spuds

Perform Steps 1 through 4 on page 4.

For Step 5: Locate the colored brass natural gas orifice spuds that were originally installed in this appliance before its conversion for use with LP gas. Observe the color of each of the spuds and note the correct burner location for each spud as shown in figure 10.

Complete Steps 6 through 9 on page 4 to complete the installation of natural gas main spuds in their correct locations.

Save the orifices removed from the appliance for future use. They will be needed if this appliance is again converted for use with LP gas.

Installation of Natural Gas Orifice Spuds

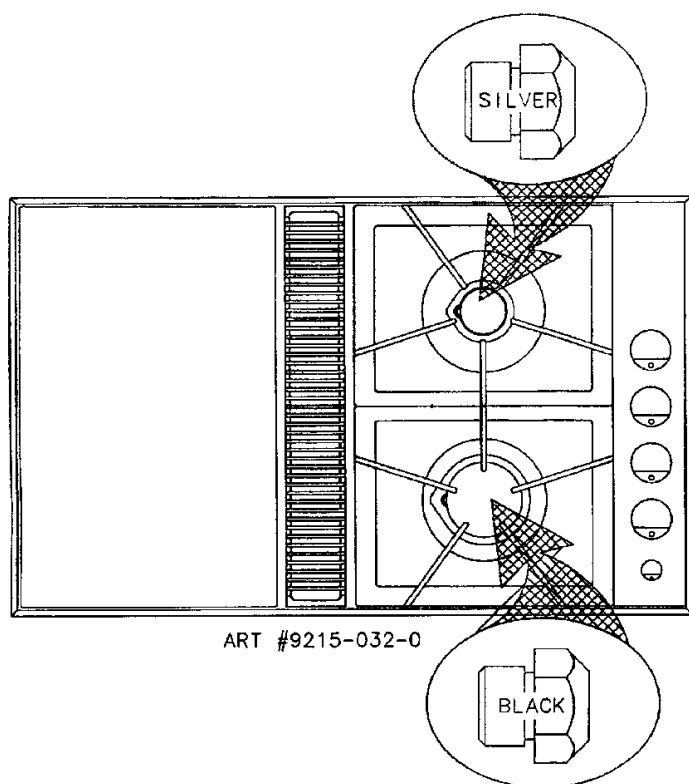


Figure 10

B. Invert Appliance Pressure Regulator Cap

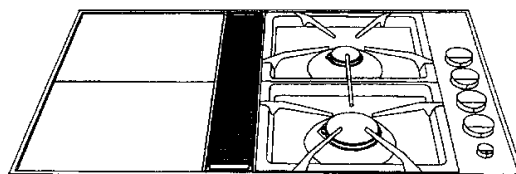
With the appliance installed, the regulator is located on the underside of the appliance at the inlet to the gas manifold. Identify the type of regulator on the unit and follow the instructions in the appropriate illustration. (See figures 7 and 8).

After Steps A and B have been completed, check the appearance of each burners' flame at the Hi and Lo settings against figure 9. If the flames appear too large or too small, review all steps to make sure they were completed correctly.

Installation of Natural Gas Orifice Spuds

This appliance is equipped for electronic auto-reignition by means of a spark igniter located at the side of each burner. The burners are designed to light at any valve rotation that admits sufficient gas flow to support a flame and to automatically re-light following a momentary loss of flame due to a draft or other adverse condition. This feature is provided as a convenience and is not intended as a safety feature.

This appliance has no air shutters, making adjustment of primary air unnecessary. The burners are designed to provide optimum aeration of all gases without air shutters. When operating properly, burners should produce clearly defined, even blue flames. If the flames have yellow tips or are hazy and otherwise appear to have insufficient air, obtain the services of a qualified service technician.



BURNER	NATURAL GAS BURNER RATE (BTU/HR)	PROPANE BURNER RATE (BTU/HR)	ALL GASES LO RATE (BTU/HR)
Right Front	12,000	8000	1,600
Right Rear	6,500	4500	800

CAUTION: Never cover control knobs or surrounding control surface with utensils, towels or other objects. Never obstruct free air passage past the control knobs. The knob openings have been sized to properly control air entry to the interior of the appliance during operation.